much less likely than a ulcerative bleed. A current database search has failed to identify evidence for the use of iv terlipressin in non variceal bleeds and we conclude that in the abscence of known varices it's use should be restricted.

► CLINICAL BOTTOM LINE

There is no evidence for the use of intravenous terlipressin in patients presenting with acute, severe upper GI bleeds unless they have endoscopic evidence of varices or a high clinical index of suspicion is met.

Beta-blockers in cocaine induced acute coronary syndrome

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Abstract

A short cut review was carried out to establish whether beta blockers should be used in the treatment of chest pain associated with cocaine use. 12 papers were found, of which two presented the best evidence to answer the clinical question. The author, date and country of publication, patient group studied, study type, relevant outcomes, results and study weaknesses of these best papers are tabulated. The clinical bottom line is that Beta Blockers should not be used in the treatment of cocaine induced myocardial ischaemia.

Three part question

In [cocaine users with chest pain suggestive of acute coronary syndrome] does [beta-blocker administration]cause [potentiation of coronary vasoconstriction]?

Clinical scenario

A 25 year old male is brought to the emergency department after he dialled 999 following sudden onset of crushing chest pain.He admitted to snorting cocaine before the episode but did not have any other past medical history.His blood pressure was 180/100 and he had been given aspirin and GTN spray by the paramedic crew.12-lead ECG in A/E showed 1 mm ST-depression in V5–V6.You make a diagnosis of acute coronary syndrome (ACS) and decide to give the maximum medical treatment for ACS including beta-blocker atenolol. An irate cardiology SpR calls you up the next day to ask you whether you haven't heard of beta-blockers worsening cocaine induced coronary vasospasm.You are shocked to hear that and wonder what the evidence-base is!

Search strategy

MEDLINE using OVID interface 1966–March 2006 and COchrane Database of Systematic Reviews 2006 Issue 1. Medline: [exp COCAINE-RELATED DISORDERS/OR exp COCAINE/] AND[exp Chest Pain/OR exp Angina pectoris OR exp Myocardial Infarction/OR acute coronary syndrome.mp] AND [exp Adrenergic beta-Antagonists/OR beta-blockers.mp. OR beta blockers.mp.].

Search outcome

Altogether 12 references were noted, of which two directly related to our question (see table 1). No additional papers were found in the Cochrane library.

Comment(s)

Beta blockade for cocaine induced myocardial infarction has been advocated in some quarters. At first sight it would seem to make sense as many of these patients will be hypertensive and suffering the effects of an adrenergic drive. However, it must be remembered that cocaine affects both alpha and beta receptors and that by giving a beta blocker the effects of alpha blockade on the heart may become unopposed. These trials seems to confirm this concern with a decrease in myocardial blood flow and coronary vasoconstriction. In a patient with myocardial ischaemia this could result in an even lower coronary blood flow thereby worsening the ischaemia. However, we must remember that this is a small study in an experimental setting with patients receiving very small amounts of cocaine (much less than the typical recreational user). It therefore makes the interpretation of these findings difficult.

On balance, in light of the feasible pathophysiological argument against the use of beta blockers, and the findings of these limited studies it appears sensible not to advocate the use of beta blockers in acute myocardial pain secondary to cocaine use.

► CLINICAL BOTTOM LINE

Beta Blockers should not be used in the treatment of cocaine induced myocardial ischaemia.

Lange RA, Cigarroa RG, Flores ED, *et al*. Potentiation of cocaine-induced coronary vasoconstriction by beta-adrenergic blockade. *Annals of Internal Medicine* 1990 Jun 15;**112**(12):897–903.
Boehrer JD, Moliterno DJ, Willard JE, *et al*. Lange RA. Influence of labetalol on cocaine-induced coronary vasoconstriction in humans. *American Journal of Medicine* 1993 Jun;**94**(6):608–10.

Ultrasound placement of needle in three-in-one nerve block

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Abstract

A short cut review was carried out to establish whether ultrasound placement of three-in-one block is better than placement using a nerve stimulator. 137 papers were found, of which two presented the best evidence to answer the clinical question. The author, date and country of publication, patient group studied, study type, relevant outcomes, results and study weaknesses of these best papers are tabulated. The clinical bottom line is that ultrasound guidance is better than electrical nerve stimulation at obtaining a good quality three in one femoral block.

Three part question

In patients [undergoing ''3-in-1'' nerve block for femoral neck fractures] is [ultrasound scanning as efficatious as nerve stimulation] for [confirmation of needle placement and reducing complications]?

Clinical scenario

A 77 year old woman presents to the emergency department following a simple fall in which she has sustained a fractured neck of femur. You have recently completed a secondment in anaesthetics and consider a ''3-in-1'' block for pain relief. One of the consultants with whom you worked stated that to perform a nerve block without using a nerve stimulator